

## Individual Drug Counseling Approach for the Treatment of Cocaine Addiction

Benefit-cost estimates updated July 2015. Literature review updated May 2014.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our [technical documentation](#).

**Program Description:** Individual drug counseling for the treatment of cocaine addiction is a manualized treatment that can be provided as a component of comprehensive outpatient therapy or as a standalone treatment. The manualized version was developed for use in the Collaborative Cocaine Treatment Study, where the individual counseling was provided in addition to group counseling. The individual drug counseling approach follows a 12-step philosophy and addresses the physical, emotional, spiritual, and interpersonal needs of the client. The model is generally applied in 36 individual sessions over 6 months with booster sessions as needed.

### Benefit-Cost Summary

#### Program benefits

Participants	\$305
Taxpayers	\$219
Other (1)	\$111
Other (2)	\$3,549
<u>Total</u>	<u>\$4,184</u>
<u>Costs</u>	<u>(\$2,344)</u>
Benefits minus cost	\$1,840

#### Summary statistics

Benefit to cost ratio	\$1.78
Benefits minus costs	\$1,840
Probability of a positive net present value	54 %

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2014). The economic discount rates and other relevant parameters are described in our [technical documentation](#).

## Detailed Monetary Benefit Estimates

Source of benefits	Benefits to				
	Participants	Taxpayers	Other (1)	Other (2)	Total benefits
From primary participant					
Crime	\$0	\$12	\$39	\$6	\$56
Labor market earnings (illicit drug abuse/dependence)	\$629	\$268	\$0	\$4,667	\$5,564
Health care (illicit drug abuse/dependence)	\$15	\$88	\$79	\$43	\$225
Labor market earnings (anxiety disorder)	(\$338)	(\$144)	\$0	\$0	(\$482)
Health care (anxiety disorder)	(\$2)	(\$5)	(\$6)	(\$3)	(\$16)
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$1,164)	(\$1,163)
Totals	\$305	\$219	\$111	\$3,549	\$4,184

We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization, the economic spillover benefits of improvement in human capital outcomes, and the benefits from private or employer-paid health insurance. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

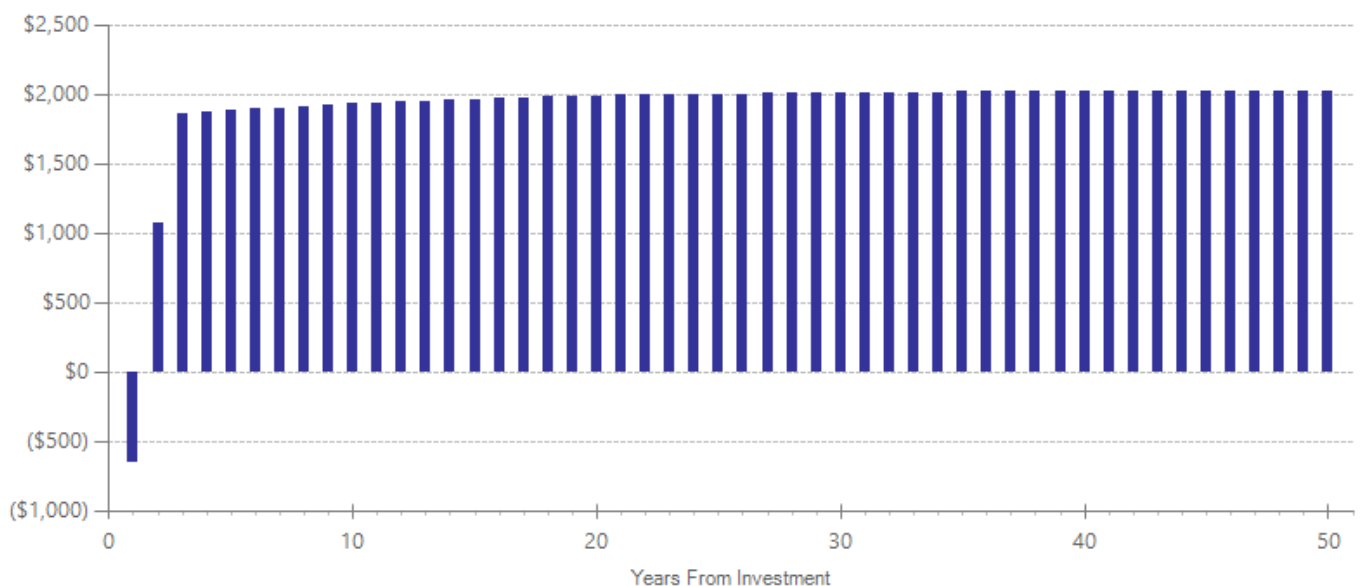
## Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	\$2,311	1	2013	Present value of net program costs (in 2014 dollars)	(\$2,344)
Comparison costs	\$0	1	2013	Uncertainty (+ or - %)	10 %

The cost of treatment is based on the single study in the analysis and includes 36 individual 50-minute sessions estimated using Washington’s current Medicaid hourly reimbursement rate for individual treatment. The costs of this intervention are in addition to group therapy provided to both the treated and comparison groups.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our [technical documentation](#).

### Cumulative Net Cash Flows Over Time (Non-Discounted Dollars)



## Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
						First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
Major depressive disorder	Primary	1	92	-0.093	0.579	-0.093	0.169	45	0.000	0.000	48
Illicit drug abuse or dependence	Primary	1	121	-0.307	0.066	-0.307	0.167	45	0.000	0.187	48
Anxiety disorder	Primary	1	92	0.044	0.793	0.044	0.168	45	0.000	0.000	48
Alcohol use	Primary	1	92	0.208	0.218	0.208	0.169	45	0.000	0.000	46
Psychiatric symptoms	Primary	1	92	-0.274	0.105	-0.274	0.169	45	0.000	0.000	46

## Citations Used in the Meta-Analysis

- Crits-Christoph, P., Siqueland, L., McCalmont, E., Frank, A., Blaine, J., Weiss, R.D., ..., Thase, M.E. (2001). Impact of Psychosocial Treatments on Associated Problems of Cocaine-Dependent Patients. *Journal of Consulting and Clinical Psychology*, 69(5), 825-830.
- Crits-Christoph, P., Siqueland, L., Blaine, J., Frank, A., Luborsky, L., Onken, L.S., ..., Beck, A.T. (1999). Psychosocial treatments for cocaine dependence: National Institute on Drug Abuse Collaborative Cocaine Treatment Study. *Archives of General Psychiatry*, 56(6), 493-502.

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